

requires an application to relate to one invention only or to a group of inventions so linked as to form a single inventive concept, i.e., a unity of invention. Rule 13.2 of the PCT sets forth that, when a group of inventions is claimed in one application, PCT Rule 13.1 is fulfilled only when there is a technical relationship among those inventions involving one or more of the same or corresponding technical features. Rule 13.2 of the PCT further defines "special technical features" as those technical features that define a contribution which each of the claimed inventions, considered as a whole, makes over the prior art.

The Examiner asserts that the inventions listed as Groups I, II and III versus Group IV do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features. Applicant respectfully disagrees for the reasons provided below.

Initially, the Examiner asserts that Group IV does not include a special technical feature that is common in Groups I, II and III. Specifically, the Examiner states that the concept of designing machines or apparatuses is a technical feature of Group IV that is not found in the plural component fibers of Group I, the nonwoven web of fabric of Group II, or the process of making fibers of Group III. However, it is respectfully submitted that, under PCT Rules 13.1 and 13.2, lack of unity of invention is not determined simply by finding a technical feature in one group that is not in another group. Rather, PCT Rules 13.1 and 13.2 clearly indicate that lack of unity of invention exists when there is no common special technical feature in each group of inventions.

Furthermore, the examples provided in Appendix AI of the MPEP clearly illustrate that unity of invention exists for two or more groups of inventions having a common special technical feature. In particular, the Examiner is requested to study Example 6 (at page AI-58 of the MPEP), which is analogous with the present application. Example 6 clearly shows that unity of invention exists between method, apparatus and product claims 1, 2, 4 and 6, because each of these claims recites the common special technical feature of tangential fuel inlets.

It is respectfully submitted that each group of claims of the present invention recites a common special technical feature relating to heating of plural-component fibers to cause differential heat shrinkage of first and second materials in the fibers such that the fibers separate into segments.

Referring to Group IV, independent claims 42 and 70 recite apparatuses including a heating unit configured to apply heat to plural-component fibers (either to heat a fiber web, as recited in claim 42, or to heat an array of fibers prior to deposition on a web-forming surface, as recited in claim 60) to cause differential heat shrinkage of first and second materials in the plural-component fibers, such that segments of the plural-component fibers comprising the first material separate from segments of the plural-component fibers comprising the second material.

Independent claim 91 of Group I recites a plural-component fiber comprising first segments comprising a first material component and second segments comprising a second material component, where the first segments are separable from second segments by application of heat that causes differential heat shrinkage of the first and second component materials.

Independent claim 78 of Group II recites a nonwoven fabric comprising first fiber segments comprising a first material, and second fiber segments comprising a second material having a heat shrinkage different from a heat shrinkage of the first material, where the first and second fiber segments have been at least partially separated by differential shrinkage induced by heat.

Finally, independent claims 1 and 22 of Group III recite methods of forming a nonwoven fabric from a process employing fiber splitting in line with fiber extrusion, including the step of applying heat to plural-component fibers (either after forming a web of the fibers, as recited in claim 1, or prior to forming a web of the fibers, as recited in claim 22) to cause separation between segments of the plural-component fibers comprising a first material and segments of the plural-component fibers comprising a second material due to differential heat shrinkage of the first and second materials.

Since each of Groups I-IV recites the previously noted common special technical feature, it is respectfully submitted that these groups all satisfy the unity of invention requirement of PCT Rules 13.1 and 13.2 and thus should not be restricted. Therefore, the Examiner's restriction requirement is improper and should be withdrawn.

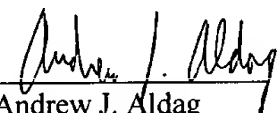
The Examiner further indicates that each of Groups I-III contain a common technical feature. However, the Examiner asserts that this common technical feature is not a special technical feature because U.S. Patent No. 4,369,156 to Mathes anticipates or renders obvious this common technical feature. Applicant disagrees with this assertion. However, it is respectfully submitted that the issue for unity of invention is not whether a technical feature of Groups I-IV is

disclosed or suggested by Mathes. Rather, as previously noted, the issue is simply whether each of Groups I-IV includes a common special technical feature. Since it is clear that all of the claims of Groups I-IV include a common special technical feature, none of these groups should be subject to restriction.

In view of the foregoing, Applicant respectfully requests the Examiner to withdraw the restriction requirement and proceed with examination of claims 1-100.

Filed concurrently herewith is a Petition (with payment) for an extension of time for one month to respond to the outstanding Office Action. Applicant hereby petitions for any additional extension of time which may be required to maintain the pendency of this case, and any required fee for such extension is to be charged to Deposit Account No. 05-0460.

Respectfully submitted,

  
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